Docket 80013 PATENT

## REMARKS

Claims 1-8 and 15-18 are pending in this application.

Claim 1 stands rejected under 35 USC 102(b) as allegedly being anticipated by United States patent 3,759,959 to Peter et al. (hereafter "Peter"). (Office action at 2-3.) Applicants respectfully traverse the rejection and the statements made in support thereof.

According to the Office Action at page 2-3, the anthraquinone (AQ) dye at the bottom of column 18 (i.e., made in Example 8) of Peter anticipates claim 1, wherein the substituents have the following meanings:  $R_1$  is H; L is CONH; R is  $C_3$  alkyl; X is  $N(R_2)$  and  $R_2$  is  $C_2$  alkyl; Q is toluene substituted with dicyanovinyl having an allegedly ethylenically unsaturated photopolymerizable group; and n is 1. Applicants respectfully disagree.

In order for a reference to anticipate a claimed invention under Section 102, the reference must identically show each and every element of the invention. See In re Bond 15 U.S.P.Q. 2d 1566 (Fed. Cir. 1990). As set forth more fully below, Peter simply does not teach or suggest each limitation of claim 1. For example, Peter neither teaches nor suggests the specified value for Q in the present claims.

Applicants note that formula I in Claim 1 of the present invention calls for a structure in which "Q is an ethylenically-unsaturated photopolymerizable or free radical polymerizable group." The structure to which the Applicants' attention has been drawn (the AQ dye made in Example 8 of Peter) does not include a value for Q that meets the foregoing conditions of Q being ethylenically-unsaturated and photopolymerizable. One skilled in the art would recognize and understand that the dicyanovinyl group to which the Examiner refers is a stable and non-reactive group; that group is not subject to photopolymerization. The skilled artisan would understand that even though the CH=C(CN)<sub>2</sub> does include an unsaturated bond, the two cyano groups have a stabilizing effect on the double bond, rendering it stable and non-reactive. Thus, the compound in Example 8 of Peter does not meet the requirements of formula I in Claim 1 of the present invention.

Applicants respectfully submit that the rejection is in error and should be withdrawn.

Claims 1 and 15 stand rejected under 35 USC 103(a) as allegedly unpatentable over Peter. (Office Action at 3-4.) Applicants respectfully traverse the rejection and the statements made in support thereof.

According to the examiner, the dye in column 6, lines 40-47 of Peter meets the limitations of claim 1 wherein:  $R_1$  is H; L is a covalent bond; R is  $C_2$  alkylene; X is  $N(R_2)$  and  $R_2$  is H; and Q is CO-CCI=CCl<sub>2</sub>. The examiner further states that "[t]he only element missing from this dye are the nitro and hydroxyl substituents on the left ring. However, patentee includes anthraquinone dyes having said substituents as equivalent to those which are unsubstituted on the left ring in several places." (Office Action at 3.) As support, the examiner points to several specific dyes in Peter.

Clearly, Peter does not anticipate the presently claimed invention, which the examiner admits. Applicants statements set forth above with respect to the rejection under section 102 are equally applicable here and are thus incorporated herein by reference.

It is well settled that in order to render obvious a claimed invention, the cited art must teach or suggest the modification necessary to arrive at the claimed invention. Moreover, the cited art must provide to the skilled artisan an expectation that the allegedly obvious modification would have a reasonable likelihood of success. Both the suggestion and the expectation of success must be found in the cited art, not the Applicants' disclosure. See In re Vaeck, 20 U.S.P.Q. 2d 1438 (Fed. Cir. 1990). In the present case, it is clear that Peter fails to meet the requirements of Vaeck and would not have rendered obvious the presently claimed invention.

Contrary to the statements in the Office Action, Peter clearly falls to provide the requisite teaching or suggestion to modify its teachings in a way that would have rendered obvious the presently claimed invention. Although the examiner alleges that Peter presents AQ dyes "as equivalent to those which are unsubstituted on the left ring," that statement is not supported by the cited art. Applicants acknowledge that numerous dyes in Peter display AQ structures having a wide variety of substituents. However, Peter simply makes no statement, teaching or suggestion that and AQ dye having nitro and hydroxyl substitutions on the left ring are equivalent to those not having any substitutions. Moreover, Peter does not suggest that one should modify any of the

dyes in a way suggested by the rejection. Since the requisite suggestion to modify Peter's dyes in the way suggested by the examiner is simply absent from the cited art, there is necessarily no suggestion or expectation that the allegedly obvious alteration would have been successful.

As to claim 15, the examiner alleges that it would have been obvious to the skilled artisan to form a concentrated composition of a known dye in a solvent, citing Peter at column 10, lines 42-47. Applicants respectfully disagree.

Contrary to the stated conclusion concerning "a known dye," the AQ dyes of the presently claimed invention are not, in fact, known. As noted above, Peter does not anticipate and would not have rendered obvious the invention of claim 1. In addition, Applicants note that claim 15 depends from claim 1, and thus includes all the limitations of claim 1. Thus, because Peter does not anticipate and would not have rendered obvious the invention of claim 1, the invention of claim 15 would likewise have been nonobvious.

Applicants respectfully submit that the rejection of claims 1 and 15 is in error and should be withdrawn.

Claims 1 and 15-18 stand rejected under 35 USC 103(a) as allegedly unpatentable over Peter. (Office Action at 4-5.) The examiner relies on Peter as applied in the foregoing rejections, but acknowledges that Peter does not disclose compositions of its dyes in concentrated form in organic solvent, or inclusion of antioxidant or UV absorbing compounds. According to the examiner, it would have been obvious to formulate a concentrated comprising a solvent, UV absorbing compounds and an antioxidant because it is well-known to provide concentrated solutions for ease of handling. Further, the examiner alleges "it is not inventive to use UV absorbing compounds and antioxidants for their known purpose." (Office Action at 4.) Applicants respectfully traverse the rejection and the statements made in support thereof. The deficiencies of Peter as regards claim 1 are set forth above, and incorporated herein by reference.

First, Applicants note that all of claims 15 through 18 ultimately depend from claim 1, and thus each includes all the limitations of claim 1 (as well as any intervening claim). As shown above, Peter clearly does not anticipate and would not have rendered

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claim 1 obvious. Because Peter does not anticipate and would not have rendered obvious the invention of claim 1, the invention of claim 15 would likewise have been nonobvious. Second, the examiner admits that Peter is silent as to concentrates having either UV absorbers or antioxidants; similarly, Peter offers no teaching or suggestion, favorable or otherwise, concerning those additives. Third, Applicants submit that the allegation that the inventions of claims 17 and 18 are " not inventive" is inapplicable to the present situation. As above, nothing in Peter teaches or suggests the presently claimed invention of claim 1, from which claims 15-18 all depend; as claim 1 is neither anticipated nor rendered obvious by Peter, all depending claims should likewise be regarded as novel and non-obvious.

Applicants respectfully submit that the rejection of claims 15 through 18 is in error and should be withdrawn.

Applicants acknowledge the examiner's statement concerning the alleged informality of claim 8. Applicants respectfully submit that, as the examiner states, the depiction is not incorrect. Further, it is clear that one skilled in the art would understand the structure set forth in claim 8.

Applicants acknowledge the examiner's objection and statement that claims 2-8 would be allowable if rewritten in independent form. As set forth above, Applicants respectfully submit that all pending claims are, in fact, patentable.

In summary, applicants believe the application to be in condition for allowance. Accordingly, the Examiner is respectfully requested to reconsider and withdraw the rejection and pass the application to issuance.

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Jo Ann Elam

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